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09/918,143	07/30/2001	Taejae Lee	STL920000098US1	3006

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EXAMINER
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ANYA, CHARLES E

ART UNIT	PAPER NUMBER
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2194

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/918,143

Applicant(s)

LEE ET AL.

Examiner

Charles E. Anya

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 3/17/05
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

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**DETAILED ACTION**

1. Claims 1-48 are pending in this application.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,987,422 to Buzsaki in view of U.S. Pat. No. 5,644,786 to Periwal et al.**

4. As to claim 1, Buzsaki teaches a method for performing workflow related operations, workflow related operation ("...invokes..." Col. 5 Ln. 21 -30), and calling the determined comprising: receiving an application programming interface call (A#) to perform a at least one stored procedure to cause the execution of one determined stored procedure on a database server to perform the workflow related operation of the API ("...program code stored..." Col. 5 Ln. 26 - 30).

5. Buzsaki does not explicitly describe determining at least one stored procedure call associated with the received API.

6. Periwal teaches determining at least one stored procedure call associated with the received API (Col. 10 Ln. 62 - 67, Col. 11 Ln. 1 - 6).

7. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Periwal and Hills because the teaching of Periwal would improve the system of Buzsaki by providing a means of determining or selecting the appropriate store procedure to use for a given call (Periwal Col. 10 Ln. 62 - 67).

8. As to claim 2, Buzsaki teaches the method of claim 1, wherein at least one stored procedure call invokes one stored procedure in the database server that includes native workflow server code to communicate to a workflow server to execute to perform the workflow (elated operation of the API and wherein at least one stored procedure call invokes one stored procedure in the database server that includes database statements executed by a database program to access workflow related metadata for the API (Col. 5 Ln. 31 - 55).

9. As to claim 3, Buzsaki teaches the method of claim 1, wherein the workflow related operation for at least one API is to be performed on a workflow server and wherein the workflow related operation for at least one API is to access workflow metadata from a workflow database (Col. 6 Ln. 12 - 30).

10. As to claim 4, Buzsaki teaches the method of claim 1, wherein the workflow related operation comprises a function to perform on a workflow server, wherein the database server includes a database program that executes one determined stored procedure to perform: communicating native workflow server code included in the executed stored procedure to the workflow server, wherein the workflow server executes the native workflow sewer code to perform the workflow related operation of the API (Col. 5 Ln. 31 - 55).

11. As to claim 5, Buzsaki teaches the method of claim 4, wherein the API and the native workflow server code are in different programming language (Col. 6 Ln. 52 - 67).

12. As to claim 6, Buzsaki teaches the method of claim 1, wherein the workflow related operation concerns accessing workflow metadata ill a workflow database, wherein the database server includes a database program that executes one determined stored procedure to perform: executing database statements included in the executed stored procedure to access workflow metadata in the workflow database (Col. 6 Ln. 12 - 30).

13. As to claim 7, Buzsaki teaches the method claim 3, wherein the database statements comprise Structured Query Language (SQL) statements (Col. 6 Ln. 65 -

14. 67).

15. As to claims 8,17,24,33 and 40, see the rejection of claim 1.
16. As to claim 9, Buzsaki teaches the method of claim 8, wherein the received at east one' call to one stored procedure comprises a first and second stored procedure calls to first and second stored procedures, respectively, on the database server to implement the workflow related operation of the API (Col. 6 Ln. 12 - 45).
17. As to claim 10, Buszaki teaches the method of claim 9, wherein executing the first stored procedure comprises authenticating the client and establishing a connection and wherein executing the second received stored procedure call comprises performing the workflow related operation of the API (Col. 6 Ln. 12 - 45).
18. As to claim 11, Buzsaki teaches the method of claim 9, wherein executing the first stored procedure comprises accessing workflow metadata from a workflow database, and wherein executing the second stored procedure comprises communicating native workflow server code and the accessed workflow metadata to a workflow server, wherein the workflow server processes the communicated native workflow server code and the workflow metadata to perform the workflow related operation of the API (Co1. 5 Ln. 31 - 51).
19. As to claim 12, Buzsaki teaches the method of claim 9, wherein executing the first stored procedure comprises communicating native workflow server code to a

workflow server, wherein the workflow server processes the communicated native workflow server code to perform the workflow related operation of the API and returns workflow metadata, and wherein executing the second stored procedure call for the API comprises updates a workflow database with the workflow metadata returned by the workflow server (Col. 5 Ln. 47 - 61).

20. As to claim 13, Buzsaki teaches the method of claim 8, wherein the received call to the stored procedure comprises a first call to a first stored procedure associated with a first API (request), wherein the first stored procedure includes database statements, wherein executing the first stored procedure comprises communicating the database statements to a database program to access workflow metadata from a workflow database, further comprising: receiving a second stored procedure call associated with a second API that invokes a second stored procedure on the database server (figure 2 Col. 6 Ln. 12 - 45), wherein the second stored procedure includes native workflow server code (Col. 6 Ln. 53 - 67)., and executing the second stored procedure to communicate the native workflow server code and the accessed workflow metadata included therein to a workflow server to process to perform the workflow related operation associated with the second API (request) (Col. 5 Ln. 31 - 51).

21. As to claim 14, Buzsaki teaches the method of claim 13, wherein the first stored procedure returns the accessed workflow metadata to the client, and wherein the second stored procedure call from the client passes the accessed workflow metadata to

the second stored procedure to communicate to the workflow server with the native workflow server code (Message Table 600 Col. 30 - 45).

22. As to claim 15, Buzsaki teaches the method of claim 8, wherein the received call to the stored procedure comprises a first call to a first stored procedure associated with a first API, wherein the first stored procedure includes native workflow server code, wherein executing the first stored procedure comprises communicating the native workflow server code to a workflow server to process and perform the workflow related operation associated with the first API, wherein the workflow server returns workflow metadata, further comprising: receiving a second stored procedure call associated with a second API that invokes a second stored procedure on the database server, wherein the second stored procedure includes database statements', and executing the second stored procedure to cause a database program to execute the database statements to update a workflow database with the returned workflow metadata (Message Table 600 Col. 6 Ln. 30 - 45).

23. As to claim 16, Buzsaki teaches the method of claim 14, wherein the first stored procedure returns the returns workflow metadata from the workflow server to the client, and wherein the second stored procedure call from the client passes the returned workflow metadata from the workflow server to the second stored procedure to call the database program to update the workflow database with the returned workflow metadata (Col. 6 Ln. 30 - 45).



24. As to claim 18, Buzsaki teaches the system of claim 17, wherein at least one stored procedure call invokes one stored procedure that includes native workflow server code to perform the workflow related operation of the API (fig 2 Col. 5 Ln. 11 - 51), while Buzsaki teaches at least one stored procedure call invokes one stored procedure that includes database statements to access workflow related metadata for the API, further comprising: a workflow server/ a database (fig 2), means, performed by the workflow server, for receiving native workflow server code from one stored procedure/ means, performed by the workflow server, for executing the received native workflow server code to perform the workflow related operation (Buzsaki Col. 5 Ln. 11 - 51), and means for executing database statements from one stored procedure to access workflow related metadata for the API from the database (Buzsaki Col. 6 Ln. 35 - 55).

25. As to claim 19, Buzsaki teaches the system of claim 17, wherein the workflow related operation for at least one API is to be performed on a workflow server and wherein the workflow related operation for at least one API is to access workflow metadata from a workflow database (Col. 5 Ln. 31 -51).

26. As to claim 20, Buzsaki teaches the system of claim 17, further comprising: a workflow server, wherein the workflow related operation comprises a function to perform on the workflow server; means, performed at the database server, for executing one determined stored procedure to communicate native workflow server code included in

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the executed stored procedure to the workflow server; and means, performed by the workflow server, for executing the native workflow sewer code to perform the workflow related operation of the API (fig 8 Col. 5.Ln. 31 - 51 , Col. 10 Ln. 27 - 67).

27. As to claims 21-23, see the rejection of claims 5-7 respectively.

28. As to claims 25,41 and 26,42, see the rejection of claims 9 and 10 respectively.

29. As to claims 27- 30 and 32, see the rejection of claims 1 1-14 and 16 respectively.

30. As to claim 31, Buzsaki teaches the system of claim 25, wherein the received call to the stored procedure comprises a first call to a first stored procedure associated with a first API, wherein the first stored procedure includes native workflow server code, further comprising: a workflow server, wherein the means for executing the at least one stored procedure performs executing the first stored procedure to communicate the native workflow server code in the first stored procedure to the workflow server to process and perform the workflow related operation associated with the first API', means for returning, performed by the workflow server, workflow metadata, wherein the means for-executing the at l east one stored procedure further performs receiving the second stored procedure call associated with a second API that invokes the second stored procedure on the database server, wherein the second stored procedure

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includes database statements; a workflow database; and executing, at the database server, the database statements in the second stored procedure to update the workflow database with the returned workflow metadata (Col. 6 Ln. 30 - 45).

31. As to claims, 34,36,37and 39, see the rejection of claims 2,4,5 and 7 respectively.

32. As to claims 35 and 38, see the rejection of claims 3 and 6 respectively.

33. As to claims 43-46 and 48, see the rejection of claims 11-14 and 16 respectively.

34. As to claim 47, see the rejection of claim 15 above.

### ***Response to Arguments***

35. Applicant's arguments filed 3/17/05 have been fully considered but they are not persuasive.

Applicant argues in substance that (1) the Buzsaki prior art reference does not teach receiving an API call to perform a workflow operation (2) the Buzsaki prior art reference does not teach calling a determined at least one stored procedure to cause the execution of the stored procedure on a database server to perform a workflow related operation of an API in response to receiving an API call, and (3) the Periwai

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prior art reference teaches away from the invention by disclosing an API call that specifies a particular single stored procedure.

Examiner respectfully traverses Applicant's argument:

As to point (1), as claimed, the invention requires the receiving of an application programming interface call to perform a workflow related operation. The requestor submitted input to a client application program initiates the execution of a workflow (column 5 lines 31 – 36) just like the application programming interface call initiates a workflow related operation. This is to say that the functionality of the phrase is to perform workflow relation operation and the prior art reference of Buzsaki meets this limitation by the execution of a workflow when a requestor submits an input to a client application program.

As to point (2), the execution of a request from client application program executes program code (stored procedure) stored in a database on a database server (column 5 lines 26 –30).

As to point (3), as claimed invention requires the prior art reference of Periwal discloses determining a stored procedure call associated with an API call by looking up the stored procedure in lookup array (column 10 lines 62 – 67).

### ***Conclusion***


36. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Anya whose telephone number is (571) 272-3757. The examiner can normally be reached on M-F (8:30-6:00) First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, An Meng-Ai can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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